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IN THE CLAIMS

Please amend claims 3-9, 12-13, 15-18 and 20-22, shown below in the set of all existing  
45 claims, as follows. No additional fees are required because the Amendment still has 22 claims, as  
filed.

1           1.       **(Previously Amended)** A method for pre-processing an access plan generated for  
2 a query in a relational database management system to include a direct call mechanism replacing  
3 a lookup function of a run-time interpreter, said access plan including a plurality of operation  
4 codes, each of said operation codes being associated with one or more executable functions for  
5 performing the query, said method comprising the steps of:

6           (a)     determining from the access plan an executable function associated with a first  
7 operation code; and

8           (b)     augmenting said first operation code in the access plan with a pointer to said  
9 executable function to provide a direct call mechanism replacing a lookup function of a run-time  
10 interpreter.

1       2.       **(Original)** The method as claimed in claim 1, further comprising repeating steps (a) and  
2 (b) for the remaining operation codes in the access plan.

1       3.       **(Currently Amended)** The method as claimed in claim 1, wherein said step (b)  
2 comprises;

3           augmenting said first operation code in the access plan with a replacement pointer to an  
4 intermediate function, ~~said intermediate function including~~ having a data structure, and  
5 ~~for storing~~ a pointer to said executable function in the data structure.

1       4.       **(Currently Amended)** The method as claimed in claim 3, wherein said data structure  
2 ~~includes~~ comprises means for storing information associated with said executable function or  
3 said first operation code.

1 5. **(Currently Amended)** The method as claimed in claim 1, wherein said step (b)  
2 comprises augmenting said first operation code in the access plan with another ~~a second~~ pointer  
3 to a data structure, said data structure providing means for storing information associated with  
4 said first operation code or said executable function.

1 6. **(Currently Amended)** The method as claimed in claim 1, ~~wherein said step (a)~~ further  
2 comprising a step of assessing the executable function associated with the first operation code to  
3 determine whether a more specific executable function exists and, if found applicable, replacing  
4 the ~~call to the~~ executable function with the ~~a call to a second~~ more specific executable function.

1 7. **(Currently Amended)** The method as claimed in claim 3, wherein said intermediate  
2 function comprises ~~includes~~ processing operations for the first operation code or the executable  
3 function associated with the first operation code.

1 8. **(Currently Amended)** The method as claimed in claim 7, wherein said processing  
2 operations in the intermediate function comprise ~~include~~ gathering statistics on the use of the  
3 executable function associated with the first operation code.

1 9. **(Currently Amended)** The method as claimed in claim 7, wherein said processing  
2 operations in the intermediate function comprise ~~include~~ a pause for receiving user input before  
3 or after the direct call to the executable function.

1 10. **(Previously Amended)** A computer program product for use on a computer wherein  
2 queries are entered by a user for retrieving data in a relational database management system  
3 having a query optimizer for generating an access plan for executing the query, said query

optimizer including a direct call mechanism replacing the lookup function of a run-time interpreter, said computer program product comprising:

a recording medium;

means recorded on said recording medium for instructing said computer to perform the steps of:

(a) determining an executable function associated with a first operation code in the access plan, the first operation code being one of a plurality of operation codes; and

(b) augmenting said first operation code in the access plan with a pointer to said executable function to provide a direct call mechanism replacing a lookup function of a run-time interpreter.

11. **(Original)** The computer program product as claimed in claim 10, the means for instructing said computer further comprising repeating steps (a) and (b) for the remaining operation codes in the access plan.

12. **(Currently Amended)** The computer program product as claimed in claim 10, wherein said step (b) comprises:

augmenting said first operation code in the access plan with a replacement pointer to an intermediate function, ~~said intermediate function including~~ having a data structure, and ~~for storing a pointer to said executable function in the data structure.~~

13. **(Currently Amended)** The computer program product as claimed in claim 12, wherein said data structure comprises ~~includes~~ means for storing information associated with said executable function or said first operation code.

1 14. (Original) The computer program product as claimed in claim 10, wherein said step (b)  
2 comprises augmenting said first operation code in the access plan with another pointer to a data  
3 structure, said data structure providing means for storing information associated with said first  
4 operation code or said executable function.

1 15. (Currently Amended) The computer program product as claimed in claim 10, wherein  
2 ~~said step (a)~~ further comprising a step of ~~includes~~ assessing the executable function associated  
3 with the first operation code to determine whether a more specific executable function exists and,  
4 if found ~~applicable~~, replacing the ~~call to the~~ executable function with the a call to a second more  
5 specific executable function.

1 16. (Currently Amended) The computer program product as claimed in claim 12, wherein  
2 said intermediate function comprises ~~includes~~ processing operations for the first operation code  
3 or the executable function associated with the first operation code.

1 17. (Currently Amended) The computer program product as claimed in claim 16, wherein  
2 said processing operations in the intermediate function comprise ~~include~~ gathering statistics on  
3 the use of the executable function associated with the first operation code.

1 18. (Currently Amended) The computer program product as claimed in claim ~~16~~ 12,  
2 wherein said processing operations in the intermediate function comprise ~~include~~ a pause for  
3 receiving user input before or after a the direct call to the executable function.

1 19. (Previously Amended) A relational database management system for use with a  
2 computer system wherein queries are entered by a user for retrieving data from tables, the

3 relational database management system including a query optimizer for generating an access  
4 plan associated with the queries entered by the user, said query optimizer including a direct call  
5 mechanism replacing a lookup function of a run-time interpreter, said relational database  
6 management system comprising:

7 (a) means for determining an executable function associated with each of a plurality  
8 of operation codes in the access plan; and

9 (b) means for augmenting said operation codes in the access plan with a pointer to  
10 said executable function associated with each operation code to provide a direct call mechanism  
11 replacing a lookup function of a run-time interpreter.

1 20. **(Currently Amended)** The relational database management system as claimed in claim  
2 19, wherein said means for augmenting said operation codes further comprises ~~includes~~ means  
3 for replacing each said operation codes in the access plan with a replacement pointer to an  
4 intermediate function, and wherein said intermediate function comprises ~~including~~ a data  
5 structure for storing a pointer to said executable function.

1 21. **(Currently Amended)** The relational database management system as claimed in claim  
2 20, wherein said data structure comprises ~~includes~~ means for storing information associated with  
3 said executable function or said operation codes.

1 22. **(Currently Amended)** The relational database management system as claimed in claim  
2 19, wherein said means for augmenting said operation codes further comprises ~~includes~~ means  
3 for adding another pointer to a data structure, said data structure providing means for storing  
4 information associated with said operation codes or said executable function.